

Evaluation of Registration Methods on Thoracic CT: The

IEEE Transactions on Medical Imaging

30, 1901-1920

DOI: [10.1109/tmi.2011.2158349](https://doi.org/10.1109/tmi.2011.2158349)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Improving Intensity-Based Lung CT Registration Accuracy Utilizing Vascular Information. International Journal of Biomedical Imaging, 2012, 2012, 1-17.	3.0	21
2	Pulmonary lobe segmentation with level sets. , 2012, , .		6
3	Piecewise-diffeomorphic registration of 3D CT/MR pulmonary images with sliding conditions. , 2012, , .		5
4	DIRBoost: An algorithm for boosting deformable image registration. , 2012, , .		3
5	Registration-based segmentation of murine 4D cardiac micro-CT data using symmetric normalization. Physics in Medicine and Biology, 2012, 57, 6125-6145.	1.6	14
6	Scale Invariant Feature Transform as feature tracking method in 4D imaging: A feasibility study. , 2012, 2012, 6543-6.		8
7	Tracking the motion trajectories of junction structures in 4D CT images of the lung. Physics in Medicine and Biology, 2012, 57, 4905-4930.	1.6	16
8	3D curve constrained deformable registration using a neuro-fuzzy transformation model. , 2012, 2012, 5294-7.		2
9	What can imaging tell us about physiology? Lung growth and regional mechanical strain. Journal of Applied Physiology, 2012, 113, 937-946.	1.2	9
10	Reproducibility of registration-based measures of lung tissue expansion. Medical Physics, 2012, 39, 1595-1608.	1.6	55
11	Toward automatic regional analysis of pulmonary function using inspiration and expiration thoracic CT. Medical Physics, 2012, 39, 1650-1662.	1.6	43
12	Biomedical Cancer Imaging Analysis. , 2012, , .		0
13	Discriminative Segmentation-Based Evaluation Through Shape Dissimilarity. IEEE Transactions on Medical Imaging, 2012, 31, 2278-2289.	5.4	8
14	Towards accurate dose accumulation for Step-&Shoot IMRT: Impact of weighting schemes and temporal image resolution on the estimation of dosimetric motion effects. Zeitschrift Fur Medizinische Physik, 2012, 22, 109-122.	0.6	21
15	MIND: Modality independent neighbourhood descriptor for multi-modal deformable registration. Medical Image Analysis, 2012, 16, 1423-1435.	7.0	478
16	Evaluation of the registration of temporal series of contrast-enhanced perfusion magnetic resonance 3D images of the liver. Computer Methods and Programs in Biomedicine, 2012, 108, 932-945.	2.6	9
17	Deformable registration of the inflated and deflated lung in cone-beam CT-guided thoracic surgery: Initial investigation of a combined model- and image-driven approach. Medical Physics, 2013, 40, 017501.	1.6	35
18	On Combining Algorithms for Deformable Image Registration. Lecture Notes in Computer Science, 2012, , 256-265.	1.0	5

#	ARTICLE	IF	CITATIONS
19	Estimation of slipping organ motion by registration with direction-dependent regularization. <i>Medical Image Analysis</i> , 2012, 16, 150-159.	7.0	81
20	Image Similarity and Tissue Overlaps as Surrogates for Image Registration Accuracy: Widely Used but Unreliable. <i>IEEE Transactions on Medical Imaging</i> , 2012, 31, 153-163.	5.4	325
21	Evaluation of advanced Lucas-Kanade optical flow on thoracic 4D-CT. <i>Journal of Clinical Monitoring and Computing</i> , 2013, 27, 433-441.	0.7	12
22	Deformable Medical Image Registration: A Survey. <i>IEEE Transactions on Medical Imaging</i> , 2013, 32, 1153-1190.	5.4	1,094
23	Dose mapping sensitivity to deformable registration uncertainties in fractionated radiotherapy applied to prostate proton treatments. <i>BMC Medical Physics</i> , 2013, 13, 2.	2.4	21
24	A fully parallel algorithm for multimodal image registration using normalized gradient fields. , 2013, , .		17
25	Tracking deformable objects with point clouds. , 2013, , .		106
26	Head movement during CT brain perfusion acquisition of patients with suspected acute ischemic stroke. <i>European Journal of Radiology</i> , 2013, 82, 2334-2341.	1.2	33
27	A Review of Recent Advances in Registration Techniques Applied to Minimally Invasive Therapy. <i>IEEE Transactions on Multimedia</i> , 2013, 15, 983-1000.	5.2	55
28	Piecewise-diffeomorphic image registration: Application to the motion estimation between 3D CT lung images with sliding conditions. <i>Medical Image Analysis</i> , 2013, 17, 182-193.	7.0	68
29	Efficient and robust model-to-image alignment using 3D scale-invariant features. <i>Medical Image Analysis</i> , 2013, 17, 271-282.	7.0	77
30	4D Modeling and Estimation of Respiratory Motion for Radiation Therapy. <i>Biological and Medical Physics Series</i> , 2013, , .	0.3	26
31	Motion Interplay as a Function of Patient Parameters and Spot Size in Spot Scanning Proton Therapy for Lung Cancer. <i>International Journal of Radiation Oncology Biology Physics</i> , 2013, 86, 380-386.	0.4	168
32	Respiratory motion models: A review. <i>Medical Image Analysis</i> , 2013, 17, 19-42.	7.0	320
33	Registration of sliding objects using direction dependent B-splines decomposition. <i>Physics in Medicine and Biology</i> , 2013, 58, 1303-1314.	1.6	68
34	Simultaneous Multiresolution Strategies for Nonrigid Image Registration. <i>IEEE Transactions on Image Processing</i> , 2013, 22, 4905-4917.	6.0	15
35	Fusion of lung MR/CT images through lung vessel registration. , 2013, 2013, 3419-22.		1
36	Fast deformable registration for soft organs with large motion in HIFU treatment. <i>Proceedings of SPIE</i> , 2013, , .	0.8	1

#	ARTICLE	IF	CITATIONS
37	A new strategy to improve coregistration of spect and MR images in patients with high grade glioma. , 2013, 2013, 4002-5.		1
38	MRF-Based Deformable Registration and Ventilation Estimation of Lung CT. IEEE Transactions on Medical Imaging, 2013, 32, 1239-1248.	5.4	208
39	Validation of Automatic Contour Propagation for 4D Treatment Planning Using Multiple Metrics. Technology in Cancer Research and Treatment, 2013, 12, 501-510.	0.8	19
40	A reference dataset for deformable image registration spatial accuracy evaluation using the COPDgene study archive. Physics in Medicine and Biology, 2013, 58, 2861-2877.	1.6	97
41	Evaluation of whole-body MR to CT deformable image registration. Journal of Applied Clinical Medical Physics, 2013, 14, 238-253.	0.8	40
42	The Role of Regularization in Deformable Image Registration for Head and Neck Adaptive Radiotherapy. Technology in Cancer Research and Treatment, 2013, 12, 323-331.	0.8	8
43	Assessing accuracy of non-linear registration in 4D image data using automatically detected landmark correspondences. Proceedings of SPIE, 2013, , .	0.8	4
44	Non-rigid registration based on local uncertainty quantification and fluid models for multiparametric MR images. Proceedings of SPIE, 2013, , .	0.8	0
45	Toward physiologically motivated registration of diagnostic CT and PET/CT of lung volumes. Medical Physics, 2013, 40, 021903.	1.6	13
46	Respiratory effort correction strategies to improve the reproducibility of lung expansion measurements. Medical Physics, 2013, 40, 123504.	1.6	28
47	Explicit B-spline regularization in diffeomorphic image registration. Frontiers in Neuroinformatics, 2013, 7, 39.	1.3	193
48	Detection of Time-Varying Structures by Large Deformation Diffeomorphic Metric Mapping to Aid Reading of High-Resolution CT Images of the Lung. PLoS ONE, 2014, 9, e85580.	1.1	14
49	The Insight ToolKit image registration framework. Frontiers in Neuroinformatics, 2014, 8, 44.	1.3	462
50	Lung Registration Using Automatically Detected Landmarks. Methods of Information in Medicine, 2014, 53, 250-256.	0.7	7
51	Automatic Detection of CT Perfusion Datasets Unsuitable for Analysis due to Head Movement of Acute Ischemic Stroke Patients. Journal of Healthcare Engineering, 2014, 5, 67-78.	1.1	15
52	T1-weighted MRI as a substitute to CT for refocusing planning in MR-guided focused ultrasound. Physics in Medicine and Biology, 2014, 59, 3599-3614.	1.6	23
53	Robust Initialization of Active Shape Models for Lung Segmentation in CT Scans: A Feature-Based Atlas Approach. International Journal of Biomedical Imaging, 2014, 2014, 1-7.	3.0	20
54	Internal Three-Dimensional Strains in Human Intervertebral Discs Under Axial Compression Quantified Noninvasively by Magnetic Resonance Imaging and Image Registration. Journal of Biomechanical Engineering, 2014, 136, .	0.6	27

#	ARTICLE	IF	CITATIONS
55	Effect of deformable registration on the dose calculated in radiation therapy planning CT scans of	1.6	14
56	Computed tomography lung iodine contrast mapping by image registration and subtraction. , 2014, , .		2
57	A multi-resolution strategy for a multi-objective deformable image registration framework that accommodates large anatomical differences. Proceedings of SPIE, 2014, , .	0.8	0
58	An efficient strategy based on an individualized selection of registration methods. Application to the coregistration of MR and SPECT images in neuro-oncology. Physics in Medicine and Biology, 2014, 59, 6997-7011.	1.6	2
59	Evaluation of Scan-Line Optimization for 3D Medical Image Registration. , 2014, , .		22
60	A method for quantitative analysis of regional lung ventilation using deformable image registration of CT and hybrid hyperpolarized gas/1H MRI. Physics in Medicine and Biology, 2014, 59, 7267-7277.	1.6	24
61	Computing global minimizers to a constrained B-spline image registration problem from optimal <i>1</i> perturbations to block match data. Medical Physics, 2014, 41, 041904.	1.6	17
62	Towards local progression estimation of pulmonary emphysema using CT. Medical Physics, 2014, 41, 021905.	1.6	49
63	Estimation of lung motion fields in 4D CT data by variational non-linear intensity-based registration: A comparison and evaluation study. Physics in Medicine and Biology, 2014, 59, 4247-4260.	1.6	48
64	Evaluation of accuracy of B-spline transformation-based deformable image registration with different parameter settings for thoracic images. Journal of Radiation Research, 2014, 55, 1163-1170.	0.8	36
65	DIRBoostâ€“An algorithm for boosting deformable image registration: Application to lung CT intra-subject registration. Medical Image Analysis, 2014, 18, 449-459.	7.0	23
66	4D-CT Lung registration using anatomy-based multi-level multi-resolution optical flow analysis and thin-plate splines. International Journal of Computer Assisted Radiology and Surgery, 2014, 9, 875-889.	1.7	13
67	A fast deformable registration method for 4D lung CT in hybrid framework. International Journal of Computer Assisted Radiology and Surgery, 2014, 9, 523-533.	1.7	12
68	Evaluation of prostate segmentation algorithms for MRI: The PROMISE12 challenge. Medical Image Analysis, 2014, 18, 359-373.	7.0	469
69	Whole-Brain Imaging with Single-Cell Resolution Using Chemical Cocktails and Computational Analysis. Cell, 2014, 157, 726-739.	13.5	1,097
70	A collaborative resource to build consensus for automated left ventricular segmentation of cardiac MR images. Medical Image Analysis, 2014, 18, 50-62.	7.0	143
71	Abdomen and Thoracic Imaging. , 2014, , .		5
72	A pre-operative CT and non-contrast-enhanced C-arm CT registration framework for trans-catheter aortic valve implantation. Computerized Medical Imaging and Graphics, 2014, 38, 683-695.	3.5	6

#	ARTICLE	IF	CITATIONS
73	Comparative Evaluation of Registration Algorithms in Different Brain Databases With Varying Difficulty: Results and Insights. IEEE Transactions on Medical Imaging, 2014, 33, 2039-2065.	5.4	144
74	Challenges of radiotherapy: Report on the 4D treatment planning workshop 2013. Physica Medica, 2014, 30, 809-815.	0.4	32
75	Comparing algorithms for automated vessel segmentation in computed tomography scans of the lung: the VESSEL12 study. Medical Image Analysis, 2014, 18, 1217-1232.	7.0	131
76	Non-rigid registration of serial dedicated breast CT, longitudinal dedicated breast CT and PET/CT images using the diffeomorphic demons method. Physica Medica, 2014, 30, 713-717.	0.4	12
77	3D movement correction of CT brain perfusion image data of patients with acute ischemic stroke. Neuroradiology, 2014, 56, 445-452.	1.1	17
78	Lung Segmentation in Chest Radiographs Using Anatomical Atlases With Nonrigid Registration. IEEE Transactions on Medical Imaging, 2014, 33, 577-590.	5.4	418
79	Pulmonary Ventilation Imaging Based on 4-Dimensional Computed Tomography: Comparison With Pulmonary Function Tests and ASPECT Ventilation Images. International Journal of Radiation Oncology Biology Physics, 2014, 90, 414-422.	0.4	81
80	PORTR: Pre-Operative and Post-Recurrence Brain Tumor Registration. IEEE Transactions on Medical Imaging, 2014, 33, 651-667.	5.4	37
81	A diffusion tensor imaging study of suicide attempters. Journal of Psychiatric Research, 2014, 51, 60-67.	1.5	77
82	Medical image registration using Edgeworth-based approximation of Mutual Information. Irbm, 2014, 35, 139-148.	3.7	7
83	Nonrigid Registration of Volumetric Images Using Ranked Order Statistics. IEEE Transactions on Medical Imaging, 2014, 33, 422-432.	5.4	5
84	An implicit sliding-motion preserving regularisation via bilateral filtering for deformable image registration. Medical Image Analysis, 2014, 18, 1299-1311.	7.0	69
85	Validation of nonrigid registration in pretreatment and follow-up PET/CT scans for quantification of tumor residue in lung cancer patients. Journal of Applied Clinical Medical Physics, 2014, 15, 240-250.	0.8	5
86	A composite registration framework for respiratory motion modelling from 4D MRI. , 2015, , .		2
87	The pediatric template of brain perfusion. Scientific Data, 2015, 2, 150003.	2.4	53
88	Deformable registration for quantifying longitudinal tumor changes during neoadjuvant chemotherapy. Magnetic Resonance in Medicine, 2015, 73, 2343-2356.	1.9	30
89	The Impact of Sources of Variability on Parametric Response Mapping of Lung CT Scans. Tomography, 2015, 1, 69-77.	0.8	25
90	Deep Adaptive Log-Demons: Diffeomorphic Image Registration with Very Large Deformations. Computational and Mathematical Methods in Medicine, 2015, 2015, 1-16.	0.7	11

#	ARTICLE	IF	CITATIONS
91	Automatic lung tumor segmentation with leaks removal in follow-up CT studies. International Journal of Computer Assisted Radiology and Surgery, 2015, 10, 1505-1514.	1.7	17
92	Assessment of myocardial metabolic disorder associated with mediastinal radiotherapy for esophageal cancer -a pilot study-. Radiation Oncology, 2015, 10, 96.	1.2	12
93	Adaptive deformable image registration of inhomogeneous tissues. , 2015, , .		1
94	Direct Visuo-Haptic 4D Volume Rendering Using Respiratory Motion Models. IEEE Transactions on Haptics, 2015, 8, 371-383.	1.8	17
95	Paired Inspiratory/Expiratory Volumetric CT and Deformable Image Registration for Quantitative and Qualitative Evaluation of Airflow Limitation in Smokers with or without COPD. Academic Radiology, 2015, 22, 330-336.	1.3	10
96	Probabilistic Sparse Matching for Robust 3D/3D Fusion in Minimally Invasive Surgery. IEEE Transactions on Medical Imaging, 2015, 34, 49-60.	5.4	11
97	Advanced Normalization Tools for Cardiac Motion Correction. Lecture Notes in Computer Science, 2015, , 3-12.	1.0	9
98	Selecting registration schemes in case of interstitial lung disease follow-up in CT. Medical Physics, 2015, 42, 4511-4525.	1.6	8
99	A Voxel-by-Voxel Comparison of Deformable Vector Fields Obtained by Three Deformable Image Registration Algorithms Applied to 4DCT Lung Studies. Frontiers in Oncology, 2015, 5, 17.	1.3	13
100	Comparison of Two Deformable Registration Algorithms in the Presence of Radiologic Change Between Serial Lung CT Scans. Journal of Digital Imaging, 2015, 28, 755-760.	1.6	7
101	Morphometry-based measurements of the structural response to whole-brain radiation. International Journal of Computer Assisted Radiology and Surgery, 2015, 10, 393-401.	1.7	10
102	Evaluation of elastix-based propagated align algorithm for VOI- and voxel-based analysis of longitudinal 18F-FDG PET/CT data from patients with non-small cell lung cancer (NSCLC). EJNMMI Research, 2015, 5, 15.	1.1	7
103	A new method to validate thoracic CT-CT deformable image registration using auto-segmented 3D anatomical landmarks. Acta Oncologica, 2015, 54, 1515-1520.	0.8	5
104	Multimodal neuroimaging computing: the workflows, methods, and platforms. Brain Informatics, 2015, 2, 181-195.	1.8	22
105	A Method for Assessing Ground-Truth Accuracy of the 5DCT Technique. International Journal of Radiation Oncology Biology Physics, 2015, 93, 925-933.	0.4	16
106	Advanced CUBIC protocols for whole-brain and whole-body clearing and imaging. Nature Protocols, 2015, 10, 1709-1727.	5.5	615
107	Lung motion estimation using dynamic point shifting: An innovative model based on a robust point matching algorithm. Medical Physics, 2015, 42, 5616-5632.	1.6	3
108	Dosimetric impact of 4-dimensional computed tomography ventilation imaging-based functional treatment planning for stereotactic body radiation therapy with 3-dimensional conformal radiation therapy. Practical Radiation Oncology, 2015, 5, e505-e512.	1.1	26

#	ARTICLE	IF	CITATIONS
109	Computed Tomography Image Matching in Chronic Obstructive Pulmonary Disease. Critical Reviews in Biomedical Engineering, 2016, 44, 411-425.	0.5	2
110	Automated alignment of perioperative MRI scans: A technical note and application in pediatric epilepsy surgery. Human Brain Mapping, 2016, 37, 3530-3543.	1.9	4
111	Novel human intervertebral disc strain template to quantify regional three-dimensional strains in a population and compare to internal strains predicted by a finite element model. Journal of Orthopaedic Research, 2016, 34, 1264-1273.	1.2	18
112	Atlas-based estimation of lung and lobar anatomy in proton MRI. Magnetic Resonance in Medicine, 2016, 76, 315-320.	1.9	22
113	MIND Demons: Symmetric Diffeomorphic Deformable Registration of MR and CT for Image-Guided Spine Surgery. IEEE Transactions on Medical Imaging, 2016, 35, 2413-2424.	5.4	39
114	Automatic quantification of multi-modal rigid registration accuracy using feature detectors. Physics in Medicine and Biology, 2016, 61, 5198-5214.	1.6	11
115	The truth is hard to make: Validation of medical image registration. , 2016, , .		14
116	Benchmarking of five commercial deformable image registration algorithms for head and neck patients. Journal of Applied Clinical Medical Physics, 2016, 17, 25-40.	0.8	65
117	Fast Deformable Image Registration with Non-smooth Dual Optimization. , 2016, , .		0
118	The Design of SuperElastix " A Unifying Framework for a Wide Range of Image Registration Methodologies. , 2016, , .		3
119	Graph Cuts-Based Registration Revisited: A Novel Approach for Lung Image Registration Using Supervoxels and Image-Guided Filtering. , 2016, , .		4
120	Evaluation of a deformable registration algorithm for subsequent lung computed tomography imaging during radiochemotherapy. Medical Physics, 2016, 43, 5028-5039.	1.6	9
121	Single-energy computed tomography-based pulmonary perfusion imaging: Proof-of-principle in a canine model. Medical Physics, 2016, 43, 3998-4007.	1.6	6
122	Efficient and Extensible Workflow: Reliable Whole Brain Segmentation for Large-Scale, Multi-center Longitudinal Human MRI Analysis Using High Performance/Throughput Computing Resources. Lecture Notes in Computer Science, 2016, , 54-61.	1.0	6
123	CT ventilation functional image-based IMRT treatment plans are comparable to SPECT ventilation functional image-based plans. Radiotherapy and Oncology, 2016, 118, 521-527.	0.3	34
124	Visualization of Deformable Image Registration Quality Using Local Image Dissimilarity. IEEE Transactions on Medical Imaging, 2016, 35, 2319-2328.	5.4	18
125	Evaluation of four-dimensional computed tomography (4D-CT)-based pulmonary ventilation: The high correlation between 4D-CT ventilation and 81mKr-planar images was found. Radiotherapy and Oncology, 2016, 119, 444-448.	0.3	12
126	Functional Image-guided Radiotherapy Planning for Normal Lung Avoidance. Clinical Oncology, 2016, 28, 695-707.	0.6	47

#	ARTICLE	IF	CITATIONS
127	Lung motion estimation by robust point matching and spatiotemporal tracking for 4D CT. Computers in Biology and Medicine, 2016, 78, 107-119.	3.9	4
128	Airway Segmentation, Skeletonization, and Tree Matching to Improve Registration of 3D CT Images with Large Opacities in the Lungs. Lecture Notes in Computer Science, 2016, , 395-407.	1.0	1
129	Inverse 4D conformal planning for lung SBRT using particle swarm optimization. Physics in Medicine and Biology, 2016, 61, 6181-6202.	1.6	18
130	Evaluation of Six Registration Methods for the Human Abdomen on Clinically Acquired CT. IEEE Transactions on Biomedical Engineering, 2016, 63, 1563-1572.	2.5	111
131	Vessel-based fast deformable registration with minimal strain energy. Biomedical Engineering Letters, 2016, 6, 47-55.	2.1	2
132	Stopping Criteria for Log-Domain Diffeomorphic Demons Registration. Technology in Cancer Research and Treatment, 2016, 15, 77-90.	0.8	2
133	Deformable image registration for multimodal lung-cancer staging. Proceedings of SPIE, 2016, , .	0.8	0
134	Fast simulated annealing and adaptive Monte Carlo sampling based parameter optimization for dense optical-flow deformable image registration of 4DCT lung anatomy. Proceedings of SPIE, 2016, , .	0.8	4
135	A survey of medical image registration “ under review. Medical Image Analysis, 2016, 33, 140-144.	7.0	224
136	Structure matching driven by joint-saliency-structure adaptive kernel regression. Applied Soft Computing Journal, 2016, 46, 851-867.	4.1	11
137	Association between radiation dose to the heart and myocardial fatty acid metabolic impairment due to chemoradiation-therapy: Prospective study using I-123 BMIPP SPECT/CT. Radiotherapy and Oncology, 2016, 119, 77-83.	0.3	8
138	A Voxel-Based Approach to Explore Local Dose Differences Associated With Radiation-Induced Lung Damage. International Journal of Radiation Oncology Biology Physics, 2016, 96, 127-133.	0.4	40
139	DR-TAMAS: Diffeomorphic Registration for Tensor Accurate Alignment of Anatomical Structures. NeuroImage, 2016, 132, 439-454.	2.1	55
140	Cloud-Based Evaluation of Anatomical Structure Segmentation and Landmark Detection Algorithms: VISCERAL Anatomy Benchmarks. IEEE Transactions on Medical Imaging, 2016, 35, 2459-2475.	5.4	127
141	Radiotherapy of Hodgkin and Non-Hodgkin Lymphoma. Technology in Cancer Research and Treatment, 2016, 15, 355-364.	0.8	7
142	Magnetic resonance imaging-guided attenuation correction in whole-body PET/MRI using a sorted atlas approach. Medical Image Analysis, 2016, 31, 1-15.	7.0	38
143	Atlas-Based Automatic Generation of Subject-Specific Finite Element Tongue Meshes. Annals of Biomedical Engineering, 2016, 44, 16-34.	1.3	17
144	Whole-body and Whole-Organ Clearing and Imaging Techniques with Single-Cell Resolution: Toward Organism-Level Systems Biology in Mammals. Cell Chemical Biology, 2016, 23, 137-157.	2.5	263

#	ARTICLE	IF	CITATIONS
145	The first patient treatment of computed tomography ventilation functional image-guided radiotherapy for lung cancer. <i>Radiotherapy and Oncology</i> , 2016, 118, 227-231.	0.3	81
146	Improving the Accuracy of Registration-Based Biomechanical Analysis: A Finite Element Approach to Lung Regional Strain Quantification. <i>IEEE Transactions on Medical Imaging</i> , 2016, 35, 580-588.	5.4	32
147	A matrix-free approach to efficient affine-linear image registration on CPU and GPU. <i>Journal of Real-Time Image Processing</i> , 2017, 13, 205-225.	2.2	5
148	Efficient Variational Approach to Multimodal Registration of Anatomical and Functional Intra-Patient Tumorous Brain Data. <i>International Journal of Neural Systems</i> , 2017, 27, 1750014.	3.2	4
149	Deformable image registration for tissues with large displacements. <i>Journal of Medical Imaging</i> , 2017, 4, 014001.	0.8	2
150	Correlation of liver and pancreas tumor motion with normal anatomical structures determined with deformable image registration. <i>Biomedical Physics and Engineering Express</i> , 2017, 3, 017001.	0.6	2
151	Low-rank and sparse decomposition based shape model and probabilistic atlas for automatic pathological organ segmentation. <i>Medical Image Analysis</i> , 2017, 38, 30-49.	7.0	62
152	Thoracic <scp>CT</scp>â€œ<scp>MRI</scp> coregistration for regional pulmonary structureâ€œfunction measurements of obstructive lung disease. <i>Medical Physics</i> , 2017, 44, 1718-1733.	1.6	17
153	Dynamic CT imaging of volumetric changes in pulmonary nodules correlates with physical measurements of stiffness. <i>Radiotherapy and Oncology</i> , 2017, 122, 313-318.	0.3	11
154	Estimation of Large Motion in Lung CT by Integrating Regularized Keypoint Correspondences into Dense Deformable Registration. <i>IEEE Transactions on Medical Imaging</i> , 2017, 36, 1746-1757.	5.4	79
155	A hybrid patient-specific biomechanical model based image registration method for the motion estimation of lungs. <i>Medical Image Analysis</i> , 2017, 39, 87-100.	7.0	32
156	BEM-based simulation of lung respiratory deformation for CT-guided biopsy. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2017, 12, 1585-1597.	1.7	6
157	Construction of a biomechanical head and neck motion model as a guide to evaluation of deformable image registration. <i>Physics in Medicine and Biology</i> , 2017, 62, N271-N284.	1.6	5
158	Registration pipeline for pulmonary free-breathing ¹H MRI ventilation measurements. <i>Proceedings of SPIE</i> , 2017, , .	0.8	3
161	Deformable image registration applied to lung SBRT: Usefulness and limitations. <i>Physica Medica</i> , 2017, 44, 108-112.	0.4	20
162	High-precision registration between zebrafish brain atlases using symmetric diffeomorphic normalization. <i>GigaScience</i> , 2017, 6, 1-15.	3.3	57
163	PET motion correction in context of integrated PET/MR: Current techniques, limitations, and future projections. <i>Medical Physics</i> , 2017, 44, e430-e445.	1.6	31
164	Convolutional auto-encoder for image denoising of ultra-low-dose CT. <i>Heliyon</i> , 2017, 3, e00393.	1.4	63

#	ARTICLE	IF	CITATIONS
165	Tidal changes on CT and progression of ARDS. Thorax, 2017, 72, 981-989.	2.7	39
166	The numerical stability of transformation-based CT ventilation. International Journal of Computer Assisted Radiology and Surgery, 2017, 12, 569-580.	1.7	29
167	Automatic error correction using adaptive weighting for vessel-based deformable image registration. Biomedical Engineering Letters, 2017, 7, 173-181.	2.1	2
168	A population level atlas of <i>Mus musculus</i> craniofacial skeleton and automated image-based shape analysis. Journal of Anatomy, 2017, 231, 433-443.	0.9	28
169	Survey of Non-Rigid Registration Tools in Medicine. Journal of Digital Imaging, 2017, 30, 102-116.	1.6	53
170	Randomly Perturbed B-Splines for Nonrigid Image Registration. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2017, 39, 1401-1413.	9.7	19
171	Radiotherapy Planning Using an Improved Search Strategy in Particle Swarm Optimization. IEEE Transactions on Biomedical Engineering, 2017, 64, 980-989.	2.5	14
172	Feature-based multi-resolution registration of immunostained serial sections. Medical Image Analysis, 2017, 35, 288-302.	7.0	27
173	Gland segmentation in colon histology images: The glas challenge contest. Medical Image Analysis, 2017, 35, 489-502.	7.0	516
174	Chronic Obstructive Pulmonary Disease: Lobar Analysis with Hyperpolarized ¹²⁹ Xe MR Imaging. Radiology, 2017, 282, 857-868.	3.6	41
175	Stochastic optimization with randomized smoothing for image registration. Medical Image Analysis, 2017, 35, 146-158.	7.0	10
176	ISLES 2015 - A public evaluation benchmark for ischemic stroke lesion segmentation from multispectral MRI. Medical Image Analysis, 2017, 35, 250-269.	7.0	360
177	Evaluation of Deformable Image Registration for Three-Dimensional Temporal Subtraction of Chest Computed Tomography Images. International Journal of Biomedical Imaging, 2017, 2017, 1-11.	3.0	3
178	4D dose simulation in volumetric arc therapy: Accuracy and affecting parameters. PLoS ONE, 2017, 12, e0172810.	1.1	8
179	Quantification of regional deformation of the lungs by non-rigid registration of three-dimensional contrast-enhanced magnetic resonance imaging. Quantitative Imaging in Medicine and Surgery, 2017, 7, 177-186.	1.1	0
180	Einfluss nicht-rigider Bildregistrierung auf 4D-Dosissimulation bei extrakranieller SBRT. Informatik Aktuell, 2018, , 188-193.	0.4	0
181	A three-dimensional single-cell-resolution whole-brain atlas using CUBIC-X expansion microscopy and tissue clearing. Nature Neuroscience, 2018, 21, 625-637.	7.1	234
182	Joint-Saliency Structure Adaptive Kernel Regression with Adaptive-Scale Kernels for Deformable Registration of Challenging Images. IEEE Access, 2018, 6, 330-343.	2.6	8

#	ARTICLE	IF	CITATIONS
183	Intrasubject multimodal groupwise registration with the conditional template entropy. <i>Medical Image Analysis</i> , 2018, 46, 15-25.	7.0	26
184	Spatial aggregation of holistically-nested convolutional neural networks for automated pancreas localization and segmentation. <i>Medical Image Analysis</i> , 2018, 45, 94-107.	7.0	255
185	Density overwrites of internal tumor volumes in intensity modulated proton therapy plans for mobile lung tumors. <i>Physics in Medicine and Biology</i> , 2018, 63, 035023.	1.6	14
186	Fast elastic registration of soft tissues under large deformations. <i>Medical Image Analysis</i> , 2018, 45, 24-40.	7.0	41
187	Inter-patient image registration algorithms to disentangle regional dose bioeffects. <i>Scientific Reports</i> , 2018, 8, 4915.	1.6	19
188	Influence of deformable image registration on 4D dose simulation for extracranial SBRT: A multi-registration framework study. <i>Radiotherapy and Oncology</i> , 2018, 127, 225-232.	0.3	16
189	Does Regional Lung Strain Correlate With Regional Inflammation in Acute Respiratory Distress Syndrome During Nonprotective Ventilation? An Experimental Porcine Study*. <i>Critical Care Medicine</i> , 2018, 46, e591-e599.	0.4	44
190	Differences in brain morphology and working memory capacity across childhood. <i>Developmental Science</i> , 2018, 21, e12579.	1.3	41
191	Recent Advances in Computed Tomography Imaging in Chronic Obstructive Pulmonary Disease. <i>Annals of the American Thoracic Society</i> , 2018, 15, 281-289.	1.5	44
192	Evaluating the interaction of a tracheobronchial stent in an ovine in-vivo model. <i>Biomechanics and Modeling in Mechanobiology</i> , 2018, 17, 499-516.	1.4	8
193	Technical Note: Correction for the effect of breathing variations in CT pulmonary ventilation imaging. <i>Medical Physics</i> , 2018, 45, 322-327.	1.6	1
194	larvalign: Aligning Gene Expression Patterns from the Larval Brain of <i>Drosophila melanogaster</i> . <i>Neuroinformatics</i> , 2018, 16, 65-80.	1.5	8
195	A new cerebral vessel benchmark dataset (CAPUT) for validation of image-based aneurysm deformation estimation algorithms. <i>Scientific Reports</i> , 2018, 8, 15999.	1.6	1
196	Benchmarking of Image Registration Methods for Differently Stained Histological Slides. , 2018, , .		23
197	Registration of CT with PET: A Comparison of Intensity-Based Approaches. <i>Lecture Notes in Computer Science</i> , 2018, , 134-149.	1.0	1
198	Why rankings of biomedical image analysis competitions should be interpreted with care. <i>Nature Communications</i> , 2018, 9, 5217.	5.8	198
199	Improved virtual surgical planning with 3D-multimodality image for malignant giant pelvic tumors. <i>Cancer Management and Research</i> , 2018, Volume 10, 6769-6777.	0.9	9
200	GDL-FIRE ^{ext} {4D}: Deep Learning-Based Fast 4D CT Image Registration. <i>Lecture Notes in Computer Science</i> , 2018, , 765-773.	1.0	25

#	ARTICLE	IF	CITATIONS
201	Evaluation of lung toxicity risk with computed tomography ventilation image for thoracic cancer patients. PLoS ONE, 2018, 13, e0204721.	1.1	6
202	Tensor-based morphometry using scalar and directional information of diffusion tensor MRI data (DTBM): Application to hereditary spastic paraplegia. Human Brain Mapping, 2018, 39, 4643-4651.	1.9	12
203	A clinical 3D/4D <scp>CBCT</scp>-based treatment dose monitoring system. Journal of Applied Clinical Medical Physics, 2018, 19, 166-176.	0.8	19
205	“Patient-specific validation of deformable image registration in radiation therapy: Overview and caveats”. Medical Physics, 2018, 45, e908-e922.	1.6	74
206	Statistical correlation of CT ventilation imaging and V/Q spect in patients with lung cancer. , 2018, , .		0
207	Comparing dual energy CT and subtraction CT on a phantom: which one provides the best contrast in iodine maps for sub-centimetre details?. European Radiology, 2018, 28, 5051-5059.	2.3	18
208	Changes in Regional Ventilation During Treatment and Dosimetric Advantages of CT Ventilation Image Guided Radiation Therapy for Locally Advanced Lung Cancer. International Journal of Radiation Oncology Biology Physics, 2018, 102, 1366-1373.	0.4	17
209	Segmentation of parotid glands from registered CT and MR images. Physica Medica, 2018, 52, 33-41.	0.4	33
210	Toward adaptive radiotherapy for lung patients: feasibility study on deforming planning CT to CBCT to assess the impact of anatomical changes on dosimetry. Physics in Medicine and Biology, 2018, 63, 155014.	1.6	29
211	Algorithms for left atrial wall segmentation and thickness “ Evaluation on an open-source CT and MRI image database. Medical Image Analysis, 2018, 50, 36-53.	7.0	40
212	A Matrix-Free Approach to Parallel and Memory-Efficient Deformable Image Registration. SIAM Journal of Scientific Computing, 2018, 40, B858-B888.	1.3	16
213	Using high-dimensional machine learning methods to estimate an anatomical risk factor for Alzheimer's disease across imaging databases. NeuroImage, 2018, 183, 401-411.	2.1	38
214	Automatic large quantity landmark pairs detection in 4DCT lung images. Medical Physics, 2019, 46, 4490-4501.	1.6	13
215	The Continuous Registration Challenge: Evaluation-as-a-Service for Medical Image Registration Algorithms. , 2019, , .		6
216	Human Disc Nucleotomy Alters Annulus Fibrosus Mechanics at Both Reference and Compressed Loads. Journal of Biomechanical Engineering, 2019, 141, .	0.6	4
217	Biphasic Model Of Lung Deformations For Video-Assisted Thoracoscopic Surgery (VATS). , 2019, , .		4
218	Deep Learning and Convolutional Neural Networks for Medical Imaging and Clinical Informatics. Advances in Computer Vision and Pattern Recognition, 2019, , .	0.9	51
219	Comparison of CT ventilation imaging and hyperpolarised gas MRI: effects of breathing manoeuvre. Physics in Medicine and Biology, 2019, 64, 055013.	1.6	7

#	ARTICLE	IF	CITATIONS
220	Deformable image registration for radiation therapy: principle, methods, applications and evaluation. <i>Acta Oncol</i> , 2019, 58, 1225-1237.	0.8	74
221	Quantitative error prediction of medical image registration using regression forests. <i>Medical Image Analysis</i> , 2019, 56, 110-121.	7.0	28
222	Accuracy of registration algorithms in subtraction CT of the lungs: A digital phantom study. <i>Medical Physics</i> , 2019, 46, 2264-2274.	1.6	5
223	Standardized Assessment of Automatic Segmentation of White Matter Hyperintensities and Results of the WMH Segmentation Challenge. <i>IEEE Transactions on Medical Imaging</i> , 2019, 38, 2556-2568.	5.4	165
224	Neural Networks for Deep Radiotherapy Dose Analysis and Prediction of Liver SBRT Outcomes. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2019, 23, 1821-1833.	3.9	25
225	Mass Effect Deformation Heterogeneity (MEDH) on Gadolinium-contrast T1-weighted MRI is associated with decreased survival in patients with right cerebral hemisphere Glioblastoma: A feasibility study. <i>Scientific Reports</i> , 2019, 9, 1145.	1.6	16
226	Mapping regional strain in anesthetised healthy subjects during spontaneous ventilation. <i>BMJ Open Respiratory Research</i> , 2019, 6, e000423.	1.2	6
227	Imaging the Injured Lung. <i>Anesthesiology</i> , 2019, 131, 716-749.	1.3	29
228	Evaluation of an Open Source Registration Package for Automatic Contour Propagation in Online Adaptive Intensity-Modulated Proton Therapy of Prostate Cancer. <i>Frontiers in Oncology</i> , 2019, 9, 1297.	1.3	5
229	A resting state fMRI analysis pipeline for pooling inference across diverse cohorts: an ENIGMA rs-fMRI protocol. <i>Brain Imaging and Behavior</i> , 2019, 13, 1453-1467.	1.1	49
230	The VAMPIRE challenge: A multi-institutional validation study of CT ventilation imaging. <i>Medical Physics</i> , 2019, 46, 1198-1217.	1.6	59
231	Influence of Inspiratory/Expiratory CT Registration on Quantitative Air Trapping. <i>Academic Radiology</i> , 2019, 26, 1202-1214.	1.3	10
232	Discontinuity Preserving Liver MR Registration With Three-Dimensional Active Contour Motion Segmentation. <i>IEEE Transactions on Biomedical Engineering</i> , 2019, 66, 1884-1897.	2.5	13
233	Recovery of 3D rib motion from dynamic chest radiography and CT data using local contrast normalization and articular motion model. <i>Medical Image Analysis</i> , 2019, 51, 144-156.	7.0	9
234	Pulmonary CT Registration Through Supervised Learning With Convolutional Neural Networks. <i>IEEE Transactions on Medical Imaging</i> , 2019, 38, 1097-1105.	5.4	115
235	A framework for Fourier decomposition free-breathing pulmonary 1 H MRI ventilation measurements. <i>Magnetic Resonance in Medicine</i> , 2019, 81, 2135-2146.	1.9	12
236	Imaging of pulmonary perfusion using subtraction CT angiography is feasible in clinical practice. <i>European Radiology</i> , 2019, 29, 1408-1414.	2.3	23
237	A Review of Deformation Models in Medical Image Registration. <i>Journal of Medical and Biological Engineering</i> , 2019, 39, 1-17.	1.0	29

#	ARTICLE	IF	CITATIONS
238	A discretize“optimize approach for LDDMM registration. , 2020, , 479-532.		3
239	Spatially adaptive metrics for diffeomorphic image matching in LDDMM. , 2020, , 533-556.		0
240	A fast and scalable method for quality assurance of deformable image registration on lung CT scans using convolutional neural networks. Medical Physics, 2020, 47, 99-109.	1.6	20
241	Image registration with sliding motion. , 2020, , 293-318.		2
242	Template Creation for High-Resolution Computed Tomography Scans of the Lung in R Software. Academic Radiology, 2020, 27, e204-e215.	1.3	5
243	Automated Superpixel-borders-guided Deformation Image Registration for Adaptive Radiotherapy. IETE Technical Review (Institution of Electronics and Telecommunication Engineers, India), 2020, , 1-11.	2.1	1
244	Evaluation of four-dimensional cone beam computed tomography ventilation images acquired with two different linear accelerators at various gantry speeds using a deformable lung phantom. Physica Medica, 2020, 77, 75-83.	0.4	2
245	Dose to Highly Functional Ventilation Zones Improves Prediction of Radiation Pneumonitis for Proton and Photon Lung Cancer Radiation Therapy. International Journal of Radiation Oncology Biology Physics, 2020, 107, 79-87.	0.4	16
246	Evaluation of the effect of user-guided deformable image registration of thoracic images on registration accuracy among users. Medical Dosimetry, 2020, 45, 206-212.	0.4	3
247	Artificial Intelligence (AI) Assisted CT/MRI Image Fusion Technique in Preoperative Evaluation of a Pelvic Bone Osteosarcoma. Frontiers in Oncology, 2020, 10, 1209.	1.3	10
248	A CNN-Based Approach for Lung 3D-CT Registration. IEEE Access, 2020, 8, 192835-192843.	2.6	4
249	A Hybrid Nonrigid Medical Image Registration Method on Chest Radiography. , 2020, , .		0
251	SLIR: Synthesis, localization, inpainting, and registration for image-guided thermal ablation of liver tumors. Medical Image Analysis, 2020, 65, 101763.	7.0	20
252	Analyzing the co-localization of substantia nigra hyper-echogenicities and iron accumulation in Parkinson's disease: A multi-modal atlas study with transcranial ultrasound and MRI. NeuroImage: Clinical, 2020, 26, 102185.	1.4	18
253	ANHIR: Automatic Non-Rigid Histological Image Registration Challenge. IEEE Transactions on Medical Imaging, 2020, 39, 3042-3052.	5.4	75
254	Evaluation of a Learning-based Deformable Registration Method on Abdominal CT Images. Irbm, 2021, 42, 94-105.	3.7	5
255	Combined Assessment of Pulmonary Ventilation and Perfusion with Single-Energy Computed Tomography and Image Processing. Academic Radiology, 2021, 28, 636-646.	1.3	1
256	Adaptive Radiation Therapy (ART) Strategies and Technical Considerations: A State of the ART Review From NRG Oncology. International Journal of Radiation Oncology Biology Physics, 2021, 109, 1054-1075.	0.4	109

#	ARTICLE	IF	CITATIONS
257	Re-Identification and growth detection of pulmonary nodules without image registration using 3D siamese neural networks. <i>Medical Image Analysis</i> , 2021, 67, 101823.	7.0	20
258	DeepTarget: Gross tumor and clinical target volume segmentation in esophageal cancer radiotherapy. <i>Medical Image Analysis</i> , 2021, 68, 101909.	7.0	43
259	Spatiotemporal Free-Form Registration Method Assisted by a Minimum Spanning Tree During Discontinuous Transformations. <i>Journal of Digital Imaging</i> , 2021, 34, 190-203.	1.6	0
260	Deep Learning Based Geometric Registration for Medical Images: How Accurate Can We Get Without Visual Features?. <i>Lecture Notes in Computer Science</i> , 2021, , 18-30.	1.0	7
261	SAME: Deformable Image Registration Based on Self-supervised Anatomical Embeddings. <i>Lecture Notes in Computer Science</i> , 2021, , 87-97.	1.0	6
262	Deep Learning for Ultrasound Image Formation: CUBDL Evaluation Framework and Open Datasets. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2021, 68, 3466-3483.	1.7	45
263	Perifocal edema volume is not associated with immunohistochemical features reflecting proliferation potential, microvessel density, neoangiogenesis and invasiveness in brain metastasis. <i>Clinical Neurology and Neurosurgery</i> , 2021, 202, 106537.	0.6	4
264	3D segmentation of lungs with juxta-pleural tumor using the improved active shape model approach. <i>Technology and Health Care</i> , 2021, 29, 385-398.	0.5	2
265	Variability in commercially available deformable image registration: A multi-institution analysis using virtual head and neck phantoms. <i>Journal of Applied Clinical Medical Physics</i> , 2021, 22, 89-96.	0.8	6
266	An approach for estimating dosimetric uncertainties in deformable dose accumulation in pencil beam scanning proton therapy for lung cancer. <i>Physics in Medicine and Biology</i> , 2021, 66, .	1.6	14
267	The ANTsX ecosystem for quantitative biological and medical imaging. <i>Scientific Reports</i> , 2021, 11, 9068.	1.6	81
268	A hybrid, image-based and biomechanics-based registration approach to markerless intraoperative nodule localization during video-assisted thoracoscopic surgery. <i>Medical Image Analysis</i> , 2021, 69, 101983.	7.0	8
269	Automated atlas-based segmentation for skull base surgical planning. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2021, 16, 933-941.	1.7	2
270	Neuropsychiatric disease classification using functional connectomics - results of the connectomics in neuroimaging transfer learning challenge. <i>Medical Image Analysis</i> , 2021, 70, 101972.	7.0	17
271	Impact of Preprocessing and Harmonization Methods on the Removal of Scanner Effects in Brain MRI Radiomic Features. <i>Cancers</i> , 2021, 13, 3000.	1.7	30
272	An unsupervised multi-scale framework with attention-based network (MANet) for lung 4D-CT registration. <i>Physics in Medicine and Biology</i> , 2021, 66, 135008.	1.6	7
273	A Framework for the generation of digital twins of cardiac electrophysiology from clinical 12-leads ECGs. <i>Medical Image Analysis</i> , 2021, 71, 102080.	7.0	72
274	Diffeomorphic respiratory motion estimation of thoracoabdominal organs for image-guided interventions. <i>Medical Physics</i> , 2021, 48, 4160-4176.	1.6	3

#	ARTICLE	IF	CITATIONS
275	A multichannel feature-based approach for longitudinal lung CT registration in the presence of radiation induced lung damage. <i>Physics in Medicine and Biology</i> , 2021, 66, 175020.	1.6	3
276	CNN-based lung CT registration with multiple anatomical constraints. <i>Medical Image Analysis</i> , 2021, 72, 102139.	7.0	39
277	GraphRegNet: Deep Graph Regularisation Networks on Sparse Keypoints for Dense Registration of 3D Lung CTs. <i>IEEE Transactions on Medical Imaging</i> , 2021, 40, 2246-2257.	5.4	30
278	Deformable registration of chest CT images using a 3D convolutional neural network based on unsupervised learning. <i>Journal of Applied Clinical Medical Physics</i> , 2021, 22, 22-35.	0.8	7
279	Benchmarking of Deformable Image Registration for Multiple Anatomic Sites Using Digital Data Sets With Ground-Truth Deformation Vector Fields. <i>Practical Radiation Oncology</i> , 2021, 11, 404-414.	1.1	12
280	A multivariable study of deformable image registration evaluation metrics in 4DCT of thoracic cancer patients. <i>Physics in Medicine and Biology</i> , 2021, 66, 035019.	1.6	3
281	Diffeomorphic Lung Registration Using Deep CNNs and Reinforced Learning. <i>Lecture Notes in Computer Science</i> , 2018, 11040, 284-294.	1.0	7
282	Multimodal 3D Registration of Anatomic (MRI) and Functional (fMRI and PET) Intra-patient Images of the Brain. <i>Lecture Notes in Computer Science</i> , 2015, , 340-347.	1.0	1
283	Estimating Large Lung Motion in COPD Patients by Symmetric Regularised Correspondence Fields. <i>Lecture Notes in Computer Science</i> , 2015, , 338-345.	1.0	27
285	Memory Efficient LDDMM for Lung CT. <i>Lecture Notes in Computer Science</i> , 2016, , 28-36.	1.0	10
286	Validation of DRAMMS among 12 Popular Methods in Cross-Subject Cardiac MRI Registration. <i>Lecture Notes in Computer Science</i> , 2012, 7359, 209-219.	1.0	11
287	Fast Explicit Diffusion for Registration with Direction-Dependent Regularization. <i>Lecture Notes in Computer Science</i> , 2012, , 220-228.	1.0	12
289	Globally Optimal Deformable Registration on a Minimum Spanning Tree Using Dense Displacement Sampling. <i>Lecture Notes in Computer Science</i> , 2012, 15, 115-122.	1.0	28
290	Computational Motion Phantoms and Statistical Models of Respiratory Motion. <i>Biological and Medical Physics Series</i> , 2013, , 215-247.	0.3	2
291	Intensity-Based Registration for Lung Motion Estimation. <i>Biological and Medical Physics Series</i> , 2013, , 125-158.	0.3	1
292	Validation and Comparison of Approaches to Respiratory Motion Estimation. <i>Biological and Medical Physics Series</i> , 2013, , 159-183.	0.3	1
293	Registration of Pre-Operative CT and Non-Contrast-Enhanced C-Arm CT: An Application to Trans-Catheter Aortic Valve Implantation (TAVI). <i>Lecture Notes in Computer Science</i> , 2013, , 268-280.	1.0	3
294	TV-L1-Based 3D Medical Image Registration with the Census Cost Function. <i>Lecture Notes in Computer Science</i> , 2014, , 149-161.	1.0	9

#	ARTICLE	IF	CITATIONS
295	Variational Registration. Informatik Aktuell, 2015, , 209-214.	0.4	9
296	Image Registration with Sliding Motion Constraints for 4D CT Motion Correction. Informatik Aktuell, 2015, , 335-340.	0.4	5
297	Deep learning in medical image registration. Progress in Biomedical Engineering, 0, , .	2.8	17
298	Positional Therapy and Regional Pulmonary Ventilation. Anesthesiology, 2020, 133, 1093-1105.	1.3	6
301	Mesh-to-raster region-of-interest-based nonrigid registration of multimodal images. Journal of Medical Imaging, 2017, 4, 1.	0.8	2
302	Error estimation of deformable image registration of pulmonary CT scans using convolutional neural networks. Journal of Medical Imaging, 2018, 5, 1.	0.8	43
303	Benchmarking Wilms's tumor in multisequence MRI data: why does current clinical practice fail? Which popular segmentation algorithms perform well?. Journal of Medical Imaging, 2019, 6, 1.	0.8	11
304	Automated volumetric lung segmentation of thoracic CT images using fully convolutional neural network. , 2018, , .		14
305	Computational Challenges and Collaborative Projects in the NCI Quantitative Imaging Network. Tomography, 2016, 2, 242-249.	0.8	15
306	Deformation Medical Image Registration Algorithm Based On Deep Prior Optical Flow Network. , 2021, , .		0
307	Intracranial Hemorrhage Brain Image Non-rigid Registration from Real-world Dataset to Reference Space. , 2021, , .		0
308	Lung Registration with Improved Fissure Alignment by Integration of Pulmonary Lobe Segmentation. Lecture Notes in Computer Science, 2012, 15, 74-81.	1.0	5
309	Intensity-Based Deformable Registration: Introduction and Overview. Biological and Medical Physics Series, 2013, , 103-124.	0.3	2
310	Decision Forests with Spatio-Temporal Features for Graph-Based Tumor Segmentation in 4D Lung CT. Lecture Notes in Computer Science, 2013, , 179-186.	1.0	0
311	Hybrid Multimodal Deformable Registration with a Data-Driven Deformation Prior. Lecture Notes in Computer Science, 2013, , 45-54.	1.0	0
312	Evaluation of Medical Image Registration by Using High-Accuracy Image Matching Techniques. , 2014, , 489-508.		0
314	Automatic Lung Tumor Segmentation with Leaks Removal in Follow-up CT Studies. Lecture Notes in Computer Science, 2014, , 92-100.	1.0	1
316	Mass Transportation for Deformable Image Registration with Application to Lung CT. Lecture Notes in Computer Science, 2017, , 66-74.	1.0	0

#	ARTICLE	IF	CITATIONS
317	XeMRI to CT Lung Image Registration Enhanced with Personalized 4DCT-Derived Motion Model. Lecture Notes in Computer Science, 2018, , 260-271.	1.0	0
318	Regional lung ventilation estimation based on supervoxel tracking. , 2018, , .		1
319	Development of a pulmonary imaging biomarker pipeline for phenotyping of chronic lung disease. Journal of Medical Imaging, 2018, 5, 1.	0.8	4
320	Agent-Based Methods for Medical Image Registration. Advances in Computer Vision and Pattern Recognition, 2019, , 323-345.	0.9	5
322	Deformable MR-CT image registration using an unsupervised, dual-channel network for neurosurgical guidance. Medical Image Analysis, 2022, 75, 102292.	7.0	21
323	Identification of modes of tumour regression in NSCLC patients during radiotherapy. Medical Physics, 2021, , .	1.6	4
324	Evaluating registrations of serial sections with distortions of the ground truths. IEEE Access, 2021, , 1-1.	2.6	1
325	A feature-based affine registration method for capturing background lung tissue deformation for ground glass nodule tracking. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 0, , 1-19.	1.3	0
326	Optical Flow with Learning Feature for Deformable Medical Image Registration. Computers, Materials and Continua, 2022, 71, 2773-2788.	1.5	1
327	Associations between tumor and edema volumes with tumor infiltrating lymphocytes in brain metastasis " A preliminary study. Clinical Neurology and Neurosurgery, 2022, 212, 107088.	0.6	0
328	Gauss-Newton Method for Segmentation assisted Deformable Registration. , 2014, , .		0
330	A Flexible Variational Registration Framework. The Insight Journal, 2014, , .	0.2	3
331	Artificial intelligence in functional imaging of the lung. British Journal of Radiology, 2022, 95, 20210527.	1.0	8
333	SAM: Self-Supervised Learning of Pixel-Wise Anatomical Embeddings in Radiological Images. IEEE Transactions on Medical Imaging, 2022, 41, 2658-2669.	5.4	21
334	Functional Lung Avoidance for Individualized Radiation Therapy: Results of a Double-Masked, Randomized Controlled Trial. International Journal of Radiation Oncology Biology Physics, 2022, 113, 1072-1084.	0.4	7
335	Joint synthesis and registration network for deformable MR-CBCT image registration for neurosurgical guidance. Physics in Medicine and Biology, 2022, 67, 125008.	1.6	9
337	Accuracy and consistency of intensity-based deformable image registration in 4DCT for tumor motion estimation in liver radiotherapy planning. PLoS ONE, 2022, 17, e0271064.	1.1	4
338	Vessel and Lung Segmentation-Based Hierarchical FFD Framework for Non-rigid Thoracic CT Registration. , 2022, , .		0

#	ARTICLE	IF	CITATIONS
339	Measurement and Analysis of Lobar Lung Deformation After a Change of Patient Position During Video-Assisted Thoracoscopic Surgery. IEEE Transactions on Biomedical Engineering, 2023, 70, 931-940.	2.5	1
340	Learning Iterative Optimisation for Deformable Image Registration of Lung CT with Recurrent Convolutional Networks. Lecture Notes in Computer Science, 2022, , 301-309.	1.0	1
341	On the Dataset Quality Control for Image Registration Evaluation. Lecture Notes in Computer Science, 2022, , 36-45.	1.0	2
342	Artificial Intelligence in Lung Imaging. Seminars in Respiratory and Critical Care Medicine, 2022, 43, 946-960.	0.8	4
343	Learn2Reg: Comprehensive Multi-Task Medical Image Registration Challenge, Dataset and Evaluation in the Era of Deep Learning. IEEE Transactions on Medical Imaging, 2023, 42, 697-712.	5.4	38
344	Robust Measures of Image-Registration-Derived Lung Biomechanics in SPIROMICS. Journal of Imaging, 2022, 8, 309.	1.7	0
345	Four-Dimensional Computed Tomography Ventilation Image-Guided Lung Functional Avoidance Radiation Therapy: A Single-Arm Prospective Pilot Clinical Trial. International Journal of Radiation Oncology Biology Physics, 2023, 115, 1144-1154.	0.4	2
346	A review of deep learning-based deformable medical image registration. Frontiers in Oncology, 0, 12, .	1.3	17
347	Cascading Affine and B-spline Registration Method for Large Deformation Registration of Lung X-rays. Journal of Digital Imaging, 2023, 36, 1262-1278.	1.6	1
348	Topography-based feature extraction of the human placenta from prenatal MR images. , 2023, , .		0
356	Multi-Scale Constrained Lung Medical Image Registration Based on Feature Reweighting. , 2023, , .		0
357	Machine learning in image registration. , 2024, , 501-515.		0